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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Petri Boman

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EXAMINER

PHAM, TUAN

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/990,133	Applicant(s) BOMAN ET AL.	
	Examiner TUAN A. PHAM	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-21 and 25-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-21, and 25-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Applicant's remark, filed on 06/14/2007, with respect to the rejection(s) of claim(s) 1-8, 10-21, and 25-29 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made over Pavet (U.S. Patent No.: 6,229,994) in view of Nilsson (U.S. Patent No.: 6,400,967).

Inventorship

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 6-7, 17, and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pavet (U.S. Patent No.: 6,229,994) in view of Nilsson (U.S. Patent No.: 6,400,967).

Regarding claims 1, 17, 25, and 28, Pavet teaches a method and a housing for a mobile telephone comprising a body having a plurality of apertures in one face for receiving the keys of a keymat mounted on an inner wall of the body (see figures 1, 2, keys 2, flexible mat 1, front cover 22, it is clearly seen that the front cover 22 has a plurality of aperture for receive the key 2 of flexible mat 1 insert thereto, col.3, ln.1-67), and an opening in the other face opposite the apertures to receive a battery pack (see figure 2, housing 25 receive the battery pack, col.3, ln.36-40).

It should be noticed that Pavet fails to teach a housing comprising a unitary tubular body having an open end for insertion of electronic components therein, wherein the electronic component are substantially housed by the unitary body upon insertion. However, Nilsson teaches a housing comprising a unitary tubular body (see figure 2, tubular housing 3) having an open end (see figure 3, remove cap 4) for insertion of electronic components therein (see figure 3, open the remove cap 4 to insert electronic package 40 or battery pack 38), wherein the electronic component are substantially housed by the unitary body upon insertion (see figure 3, col.5, ln.25-50, col.6, ln.7-41). Furthermore, It appear to examiner that to design the mobile phone that has the tubular shape would depend more upon the choice of the manufacturer and the choice of engineering, than on any inventive concept).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Nilsson into view of Pavet in order to make the cellular phone in the form of small and inexpensive as suggested by Nilsson at column 2, lines 23-26.

Regarding claims 2 and 29, Nilsson further teaches a housing including a member for closing the open end of the tubular body (see figure 2, remove cap 4).

Regarding claim 3, Nilsson further teaches a housing wherein the member is configured to support electronic components thereon (see figure 3, electronic package 40).

Regarding claim 4, Pavet further teaches a housing wherein the member includes a support for locating and retaining a printed circuit board thereon (see figure 2, circuit board 20 is mounted on rear case 24).

Regarding claim 6, Nilsson further teaches a housing wherein a portion of the inner peripheral wall of the member includes a recess to receive a transducer module (see figure 3, earphone 20).

Regarding claim 7, Nilsson further teaches a housing including a guide on the body to receive and support electronic components mounted on the member (see figure 3, it is obvious the inside housing 3 has a guide to hold the electronic package 40).

Regarding claim 26, Nilsson further teaches a method wherein the housing is extruded (see figure 3).

Regarding claim 27, Nilsson further teaches a method wherein the housing is formed from sheet metal. It is obvious the housing can be used with any material.

5. Claims 5, 8, 10-16, and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pavet (U.S. Patent No.: 6,229,994) in view of Nilsson (U.S. Patent No.: 6,400,967) as applied to claim 1 above, and further in view of Kubo (U.S. Patent No.: 6,580,923).

Regarding claim 5, Pavet and Nilsson, in combination, fails to teach a housing wherein the support includes an integrally moulded clip to receive the edge of a printed circuit board and a location spigot to support the underside thereof. However, Kubo teaches such features (see figure 3, it is obvious the housing portion 32 should be included a moulded clip to support the PCB 36 within the housing).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kubo into view of Pavet and Nilsson in order to secure the PCB.

Regarding claim 8, Kubo further teaches a rail (see col.5, ln.65).

Regarding claim 10, Kubo further teaches a housing wherein the body includes means to releasably secure a keymat retaining plate over the keymat (see figure 3, key group sheet 31, col.4, ln.46-55).

Regarding claim 11, Kubo further teaches a housing wherein the means comprises an integrally formed tab on the body for location of the retaining plate there under (see figure 3, key group sheet 31, col.4, ln.46-55).

Regarding claim 12, Kubo further teaches a housing wherein the retaining plate (i.e., flexible printed circuit board) is formed from a resilient flexible material and is a snap fit beneath the integrally formed tab on the body (see figure 3, col.7, ln.62-67).

Regarding claim 13, Kubo further teaches a housing wherein a portion of the body overlaps the member, the body and member including co-operating parts (i.e., handle) to mount the member on the body (see figure 4, handle 52c-3, col.6, ln.30-52).

Regarding claim 14, Kubo further teaches a housing wherein the co-operating parts includes a flange on the member that forms an interference fit with the body (see figure 6, 52b-2, col.6, ln.19-27).

Regarding claim 15, Nilsson further teaches a housing a lock for releasable securing the member mounted to the body (see col.5, ln.40-50).

Regarding claim 16, Nilsson further teaches a housing wherein said lock includes an aperture in the member and a boss in the body, fastening means being insertable through the aperture for location in the boss (see col.5, ln.40-50).

Regarding claim 19, Kubo further teaches a housing including a key mat, a key mat retaining plate and a battery pack, the retaining plate being configured such that the key mat is biased against the housing by the retaining plate when the battery pack is mounted in the housing (see figure 3, col.4, ln.46-67).

Regarding claim 20, Kubo further teaches a housing wherein the retaining plate includes resiliently deformable regions raised out of the plane of the plate, said regions being deflected back towards the plane of the plate by the battery pack mounted in the housing, thereby biasing the key mat against the housing (see figure 6, col.6, ln.1-26).

Regarding claim 21, Kubo further teaches a housing wherein the resiliently deformable regions are a plurality of spaced parallel ribs (see figure 3, col.6, ln.1-27).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Pham whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Technology 2600
Art Unit 2618
August 16, 2007
Examiner

Tuan Pham

